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(54) Title: OBJECT DETECTION SYSTEM

(57) Abstract: An object detection system utilizing one or more thin, planar structured light patterns projected into a volume of interest, along with digital processing hardware and one or more electronic imagers looking into the volume of interest. Triangulation is used to determine the intersection of the structured light pattern with objects in the volume of interest. Applications include navigation and obstacle avoidance systems for autonomous vehicles (including agricultural vehicles and domestic robots), security systems, and pet training systems.

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